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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/696,675	10/25/2000	Eric J. Geiger	T99,005-B	4590

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EXAMINER
SERGENT, RABON A

ART UNIT	PAPER NUMBER
1711	7

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/696,675	Geiger et al.
Examiner	**Art Unit**
Rabon Sergent	1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *three* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Nov 25, 2002* .

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above, claim(s) *10-31 and 40* is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-9 and 32-39* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

1. Applicant's election without traverse of Group I, claims 1-9 and 32-39 in Paper No. 5, filed November 25, 2002 is acknowledged.

2. Claims 1-9 and 34-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The percent ranges for components (b)(1), (b)(2), and (b)(3) of claim 1 and the components a), b), and the alkoxylating agent of claim 34 are improper, because the endpoints of the percent ranges cannot be reached, as the sum would exceed 100 percent. For example, if 98 percent of the polyol and 2 percent of the acid are used, no alkoxylating agent can be utilized.

Furthermore, it is not clear that the auxiliary polyether polyol or polyester polyol is mutually exclusive from the polyester-ether polyol. Also, no basis has been specified for the weight percent.

Within claim 5, it is questioned if the definition of n1 is correct. It is unclear why there are multiple occurrences of "independently".

Within claims 8 and 9, the use of the "-based" suffix renders the claims indefinite, because it is not clear to what extent the polyols are derived from the polyether or polyester.

Within claim 36, the use of "may be" renders the claims indefinite, because it is unclear to what extent the language denoted by "may be" is optional. Furthermore, reference has been made to formula I; however, the formula has not been labeled as I.

Within claim 38, DME has not been defined.

3. Claims 1-9, 32, and 34-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is improper to define the number of carbon atoms within the various definitions by using "about". It is unclear how to interpret such integer values, and it cannot be determined exactly which compounds are encompassed by the claims.

4. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 depends from claim 4 which depends from claim 3; therefore, the alkoxylating agent of claim 5 is limited to propylene oxide; however, claim 5 specifies alkylene oxide residues other than those derived from propylene oxide.

5. Claims 1-4, 8, and 9 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Applicants have provided enablement only for the production of polyester-ethers wherein the polyester is produced and subsequently alkoxylated; however, the polyester-ether of claim 1 is not so limited.

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1, 3-9, 32-34, and 39 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4, 5, 8, 9, 33, and 34 of copending Application No. 09/427,050. Although the conflicting claims are not identical, they are not patentably distinct from each other because each claim set is drawn to compositions comprising equivalent polyester-ether polyols and methods of making the polyester-ether polyols.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1, 2, 8, 9, 34, and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Mayer et al. ('580).

Patentee discloses a polyester-ether polyol, suitable for producing polyurethanes, wherein a polyester is produced from a glycol, such as diethylene glycol, and phthalic anhydride and is subsequently ethoxylated. See column 3, line 61 through column 4, line 8 and column 5, lines 49-52.

10. Claims 1-9 and 32-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mayer et al. ('580) in view of Allen et al. ('601).

As aforementioned, Mayer et al. disclose the ethoxylation of a polyester derived from a glycol and phthalic anhydride; however, patentees are silent regarding the use of propylene oxide as the alkoxylating agent. Under the provisions of MPEP 2144.03, the position is taken that the use of propylene oxide as a terminating alkoxylation agent was known at the time of invention as a means for terminating reactants or polyols with less reactive or secondary hydroxyl groups. Furthermore, the use of double metal cyanide catalysts to produce polyoxypropylene polyols was known at the time of invention to be preferable over methods which utilize more conventional catalysts, such as KOH, because the double metal cyanide catalyzed polyoxypropylene polyols display increased functionality and decreased levels of unsaturation, by comparison. This position is supported by the teachings of Allen et al.

11. Therefore, it would have been obvious to one of ordinary skill to substitute propylene oxide for ethylene oxide within the method of Mayer et al. and further, to use double metal cyanide catalysts to catalyze the alkoxylation step, so as to obtain polyoxypropylene terminated

polyester-ethers having the improved properties associated with the use of double metal cyanide catalysts.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.

RABON SERGENT
PRIMARY EXAMINER

R. Sergent

February 9, 2003